

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1 (currently amended). A method for producing a controlled release matrix pharmaceutical dosage form or precursor thereof, comprising co-extruding through an extruder preparing a controlled release matrix consisting essentially of at least one pharmaceutically active agent and at least one starch, wherein the starch is amorphous or partially amorphous, by coextrusion of the active agent and starch wherein the co-extruding is under shear force, temperature and pressure conditions such that the starch in the extruded controlled release matrix is vitrified.

2 (currently amended). The method of claim 1, wherein the ~~extrusion~~ temperature at the orifice of the extruder during the extrusion process is below 100°C under normal pressure.

3 (currently amended). The method of claim 1, wherein the at least one pharmaceutically active agent and the at least one starch are dry mixed prior to co-extruding to form a dry mix the coextrusion.

4 (previously presented). The method of claim 3, wherein up to 15% by weight water is added to the dry mix prior to co-extruding the coextrusion.

5 (previously presented). The method of claim 1, wherein the matrix is water-insoluble.

6 (previously presented). The method of claim 1, wherein the co-extruding coextrusion is performed with sufficient under shear force, temperature, ~~heat,~~ and pressure conditions or combination thereof to achieve glass transition of the starch.

Claims 7-9 (canceled).

10 (currently amended). A controlled release matrix pharmaceutical dosage form or precursor thereof produced by the method of claim 1, 2, 3, 4, 5, 20, 21 or 22 comprising a controlled release matrix consisting essentially of at least one active agent and at least one starch, the controlled release matrix being formed by coextrusion of the active agent and the starch, and the starch being amorphous or partially amorphous.

Claims 11-15 (canceled).

16 (currently amended). The matrix dosage form of claim 10, wherein the release of the pharmaceutically active agent from ~~of the matrix dosage form~~ substantially follows the lapis rule function.

17 (currently amended). The matrix dosage form of claim 10, wherein the release of the pharmaceutically active agent from ~~of the matrix dosage form~~ is over 24 hours or more.

18 (currently amended). The matrix dosage form of claim 10, wherein the pharmaceutically active agent is present in the matrix as a liquid ~~in dissolved, solid or liquid form~~.

Claim 19 (canceled).

20 (new). The method of claim 1, further comprising processing the matrix into granulates or into a mono-block pharmaceutical dosage form.

21 (new). The method of claim 1, wherein the temperature in the feed area of the extruder is about 65°C, the temperature in the screw area is about 80°C, and the temperature in the die is about 98°C.

22 (new). The method of claim 1, wherein the starch is selected from the group consisting of tapioca starch, wheat starch, potato starch, corn starch, acetylic starch, partially pregelatinized starch, wax corn starch, amylo corn starch, and a mixture of any of the foregoing.

23 (new). The matrix of claim 10, wherein the pharmaceutically active agent is present in the matrix as a solid.

24 (new). The matrix of claim 10, wherein the pharmaceutically active agent is dissolved in the matrix.

25 (new). A controlled release matrix, comprising at least one starch and at least one pharmaceutically active agent, wherein the starch in the matrix is vitrified, and wherein the starch and pharmaceutically active agent were co-extruded.

26 (new). The matrix of claim 25, wherein the matrix is free of pores.

27 (new). The matrix of claim 25, which is water-insoluble.

28 (new). The matrix of claim 25, wherein the pharmaceutically active agent is present in the matrix as a liquid.

29 (new). The matrix of claim 25, wherein the pharmaceutically active agent is present in the matrix as a solid.

30 (new). The matrix of claim 25, wherein the pharmaceutically active agent is dissolved in the matrix.

31 (new). The matrix of claim 25, wherein the release of the pharmaceutically active agent from the matrix substantially follows the lapidus rule.

32 (new). The matrix of claim 25, wherein the release of the pharmaceutically active agent from the matrix is over 24 hours or more.